



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/718,308 | 11/20/2003 | David G. Deak | DD-m101 | 9774 |
| 23432 | 7590 | 02/07/2006 | EXAMINER | |
| COOPER & DUNHAM, LLP 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036 | | | EDWARDS JR, TIMOTHY | |
| | | ART UNIT | PAPER NUMBER | |
| | | | 2635 | |

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

E/C

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/718,308 | DEAK, DAVID G. | |
| | Examiner | Art Unit | |
| | Timothy Edwards, Jr. | 2635 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 November 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-4 and 7-14 is/are rejected.

7) Claim(s) 5 and 6 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,4,9-11,13,14 are rejected under 35 U.S.C. 102(e) as being anticipated by Boyd et al '894.

Considering claim 1, Boyd discloses a self-powered switching device comprising, a) a housing (see col 2, line 67 to col 3, line 3); b) an actuation means (see col 2, lines 53-54); c) a power generating means capable of generating a voltage from the physical movement of the actuation means (see col 2, lines 55-60); d) power generating means in operative communication with a transmitter for transmitting a signal such that the signal is addressed, so that the signal is unique (see col 3, lines 9-17); e) a receiver means for receiving a signal and a series of programmed instructions and effective to direct an operation (see col 11, lines 5-14 and lines 29-34); f) a protocol for employing the series of instructions received by the receiver and effective to direct an operation (see col 11, lines 29-34).

Considering claim 4, Boyd discloses the limitation of this claim see col 7, lines 21-30.

Considering claims 9 and 10, Boyd discloses the limitations of these claims see col 9, lines 19-23 and lines 41-45.

Considering claim 11, Boyd discloses the limitation of this claim see fig 6, items 40 and 80.

Considering claim 13, Boyd discloses the limitation of this claim see col 7, lines 55-58.

Considering claim 14, Boyd discloses the limitation of this claim see col 11, lines 21-24.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2,3,7,8,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyd et al.

Considering claim 2, Boyd discloses a self-powered switching device comprising, a) a housing (see col 2, line 67 to col 3, line 3); b) an actuation means (see col 2, lines 53-54); c) a power generating means capable of generating a voltage from the physical movement of the actuation means (see col 2, lines 55-60); d) power generating means in operative communication with a rectifier (see col 8, lines 15-18 and lines 52-57); e) a filter in communication with a voltage regulator (see col 8, lines 58-66); f) a microchip transmitter containing encoded data and enabled to transmit this data to a remote antenna (see fig 6, items 40, 50, 60, and 70); g) providing a specific frequency for the transmission of data (see col 10, lines 52-66); except Boyd does not specifically recite providing a specific frequency by virtue of a crystal. Boyd teaches the use of an LC tank circuit which resonates at a specific frequency to produce an RF signal at that frequency. Therefore, it would have been obvious to one of ordinary skill in the art to use an alternate method of producing a specific frequency such as a crystal because Boyd teaches the desire to send a signal at a specific frequency; h) a remote antenna in communication with a microchip receiver (see col 11, lines 8-11); i) a decoder to decode the encoded data received signal (see col 11, lines 8-14); j) the receiver activates a latch and communicate with a driver (see col 3, lines 36-40); k) relay driver being in communication with a relay which in turn is in operative communication with an end appliance (see col 3, lines 9-17); l) and a power supply (see col 11, lines 17-22).

Considering claim 3, Boyd discloses, a) a housing (see col 2, line 67 to col 3, line 3); b) a piezoelectric actuator (see col 4, lines 29-32); c) a pair of wires in communication with

Art Unit: 2635

the piezoelectric actuator (see col 6, lines 59-65); d) a plunger to deform the piezoelectric actuator and create a voltage (see col 7, lines 9-16 and lines 58-62); except Boyd does not specifically recite a pair of rigid support rods to hold the piezoelectric actuator with the housing. However, Boyd discloses in col 7, lines 36-48 means for holding a piezoelectric actuator in its un-deformed and deformed state. One of ordinary skill in the art would readily recognize the need to hold the piezoelectric actuator in a housing. Therefore, it would have been obvious to one of ordinary skill in the art to use some means to hold the piezoelectric actuator.

Considering claim 7, Boyd discloses, a) an electrical conduit to send a voltage from a power generating means (see col 8, lines 3-23); b) a transient capacitor and a rectifier to convert AC to pulsating DC (see col 9, lines 19-23 and lines 41-45); c) a capacitor for storing a voltage prior to utilizing the voltage (see col 9, lines 26-58); d) a transmitter to send addressed data to a receiver (see col 11, lines 4-14); e) receiver utilizing the data to perform an operation (see col 11, lines 29-34); 1) except Boyd does not specifically recite the use of a super capacitor. However, Boyd discloses the use of a capacitor for storing a voltage prior to utilizing the voltage. Therefore, it would have been obvious to one of ordinary skill in the art to use any capacitor which would have the charge capacity desired in the Boyd system because Boyd discloses the use of a capacitor for storing a voltage prior to utilizing the voltage.

Considering claim 8, the limitation of this claim is interpreted and rejected as stated in claim 7, part (1).

Considering claim 12, Boyd does not specifically recite the transmitter and the receiver comprises a transceiver chip. However, applicant admits in his specification on page 3, lines 22-26 transceivers of a given frequency may be purchased off the shelf. Therefore, it would have been obvious to one of ordinary skill in the art to use this transceiver in the Boyd system because this item is readily available.

Allowable Subject Matter

5. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 6 is also objected to because it depends on claim 5.

6. The following is a statement of reasons for the indication of allowable subject matter: the closes prior art fails to teach or suggest a magnet above a coil so that the magnet is drawn across the coil, a lever to encourage an outstanding nub to engage an actuation nub so that the magnet which is attached to at least two springs moves back and forth over the coil to produce a voltage.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Maue et al '310, Braun et al '712, Bergman et al '010 and Taranowski et al '372 disclose self-powered wireless transmitters. Face '108 and Hamel et al '662 teaches a self-powering transmitting device comprising a magnet and a coil for generating power. However, the present application antedates Face '108. Hamel '662 fails to teach or suggest the structural and operating method of the present application.

8. Any inquiry concerning this communication should be directed to Examiner Timothy Edwards at telephone number (571) 272-3067. The examiner can normally be reached on Monday-Thursday, 8:00 a.m.-6:00 p.m. The examiner cannot be reached on Fridays.

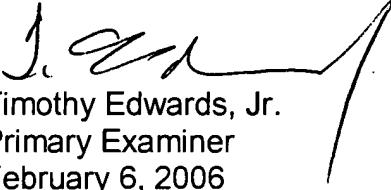
If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached at (571) 272-3068.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

Any response to this action should be fax to:

(571) 273-8300 (for formal communications intended for entry).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov> or contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Timothy Edwards, Jr.
Primary Examiner
February 6, 2006